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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/784,058 | 02/20/2004 | Chung-Wen Ko | 250122-1240 | 6848 |

24504 7590 10/05/2006

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| EXAMINER |
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LIE, ANGELA M

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| ART UNIT | PAPER NUMBER |
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2163

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/784,058 | Applicant(s) KO, CHUNG-WEN | |
| | Examiner Angela M. Lie | Art Unit 2163 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

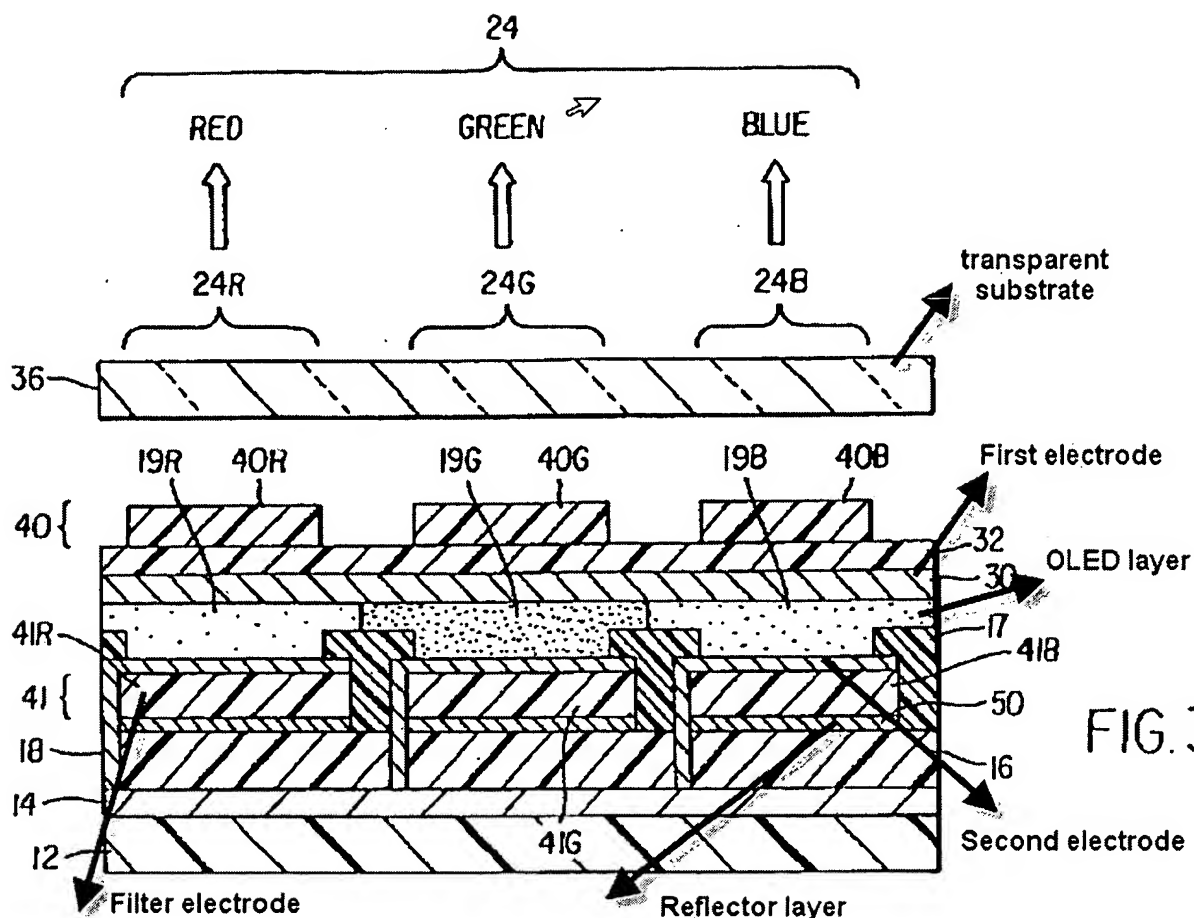
A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. **Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Cok (US Patent 6911772).**

As to claim 1, Cok discloses an organic electroluminescent display, comprising: an organic electroluminescent display (OLED) panel (Figure 3, elements 36, 40, 30, 19 and 18); a reflective sheet (Figure 3, element 50); and a brightness regulating film for light transmission placed between the organic electroluminescent display panel and the reflective sheet (Figure 3, element 41).



As to claim 2, Cok discloses the display wherein the organic electroluminescent display panel further comprises: a transparent substrate (Figure 3, element 36); a first transparent electrode (Figure 3, element 30) over the transparent substrate; a light-emitting layer (Figure 3, element 19) over the first transparent electrode; and a second transparent electrode (Figure 3, element 18) over the light emitting layer.

As to claim 3, Cok discloses the display wherein the light emitting layer is an organic electroluminescent film (column 10, line 65).

As to claim 4, Cok discloses the display wherein the brightness regulating film is an optical slit to control light from the environment (column 4, lines 32-36).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cok (US Patent 6911772) in the view of Richard (US Patent 6759945).**

As to claims 5 and 6, Cok teaches all the limitations disclosed in claim 4 except for the brightness regulating film being made of electro-chromic or liquid crystal capable for controlling light transmission thereon by adjusting current applied thereto. Richard teaches a variable transmittance device comprising a super-twisted nematic (STN) liquid crystal cell connected to the adjustable voltage source and photo sensor, so that transitivity of STN can be adjusted based on detected light. It would have been obvious to one of the ordinary skill in the art during the time the invention was made to incorporate Richard's light adjustment means into the display as taught by Cok (i.e. replace the existing filter 41) because brightness regulating means taught by Richard increase the contrast of the display independently of the ambient light, furthermore the brightness regulating mechanism allow for a fast response, good viewing angle and high tolerance of temperatures (column 3, lines 1-10).

With respect to claim 6, a photo sensor to detect light intensity of the environment is necessary to the device as described above. Richard teaches two photo sensors connected to the STN, wherein one of those sensor is used to detect ambient light.

As to claim 7, Richard teaches the device wherein the brightness regulating film adjusts the light transmission intensity from the environment according to a light intensity of the environment detected by the photo sensor (column 3, lines 33-57).

As to claim 8, Cok teaches all the limitations presented in claim 1 except for the brightness regulating film adjusting a light-transmitting mode thereof by controlling current intensity applied thereon according to a light intensity of the environment as detected by the photo sensor. Richard teaches a super-twisted nematic liquid crystal connected to the photo sensors and adjustable voltage supply. As the light detected by photo sensors changes control voltage is also changed and this causes change in the STN liquid crystal transitivity (reflectance). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to incorporate Richard's light adjustment means into the display as taught by Cok. (i.e. replace the existing filter 41) because brightness regulating means taught by Richard increase the contrast of the display independently of the ambient light, furthermore the brightness regulating mechanism allow fast response, good viewing angle and high tolerance of temperatures (column 3, lines 1-10).

Response to Arguments

6. Applicant's arguments, see pages 4-6, filed September 6, 2006, with respect to the rejection(s) of claim(s) 1-8 under 102(e) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Cok (US Patent 6911772) and Richard (US Patent 6759945).

The Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Garner et al (US Publication 20040217702) disclose a light extraction design for organic light emitting diodes.

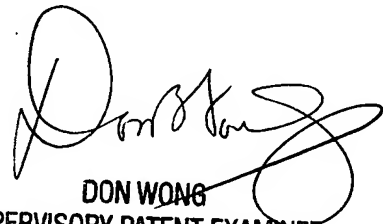
Inquiry

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2163

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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DON WONG
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